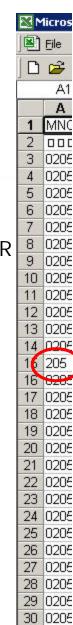


In the georelational model, features and corresponding attribute records are 'tagged' with a common feature identifier (e.g., polygon identifiers A, B and C).



1. EXTRACT DATA FROM MOD 4

- MAKE A BACKUP OF THE BERGEN/HUDSON 2004 ACCESS DATA IN YOUR FOLDER
- QUERY RECORDS FOR DESIRED TOWN BY MUNICIPAL CODE
 - 1. CHECK FOR INCONSISTENCIES IN THE DATA ** if you use the DBF file
 - MUNICIPAL CODE
 - FIX DATA BEFORE PROCEEDING
- EXTRACT SELECTED RECORDS INTO A NEW TABLE.
- 4. DO NOT DELETE ANY FIELD YET!
 - LATER ON WE WILL SPLIT THE TABLE INTO
 - OWNER TABLE
 - ASSESSMENT TABLE (TAX TABLE)



31 205



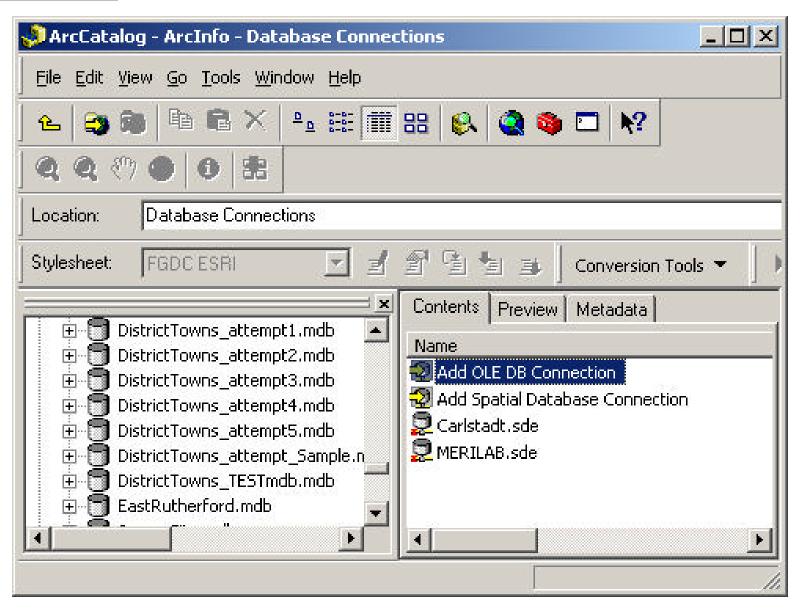
2. CREATE A OLE DB CONNECTION (viewing org. Data)

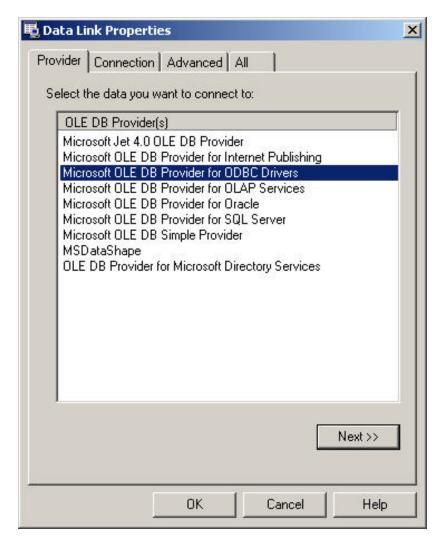
- 1. KEEP MOD4 DATABASE AS AN ACCESS FILE
- 2. ADD IT TO ARCMAP BY CREATING A OLE DB CONNECTION
 - Retrieve data from a Database. You can view tabular information in ArcMap and in ArcCatalog – No Data Duplication –
 - No Object Id: ArcMap temporarily adds an ObjectID field in order to to support some operations on the table
 - Read Only DB: No Modifying data or relates

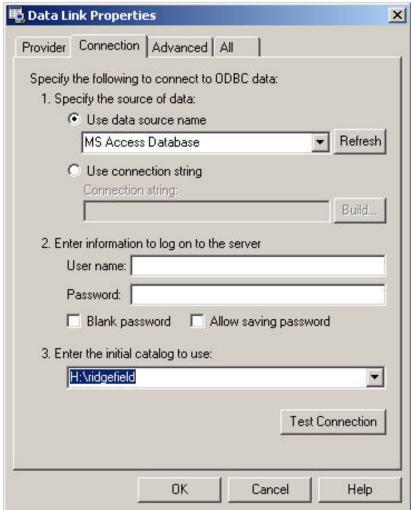
3. PROCESS:

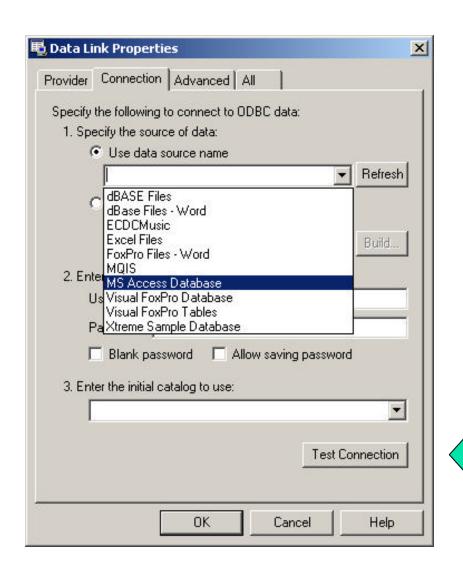
- 1. ADD OLE DB CONNECTION
- 2. PROVIDE ODBC DRIVERS FOR A OLE DB CONNECTION

PROCESS:

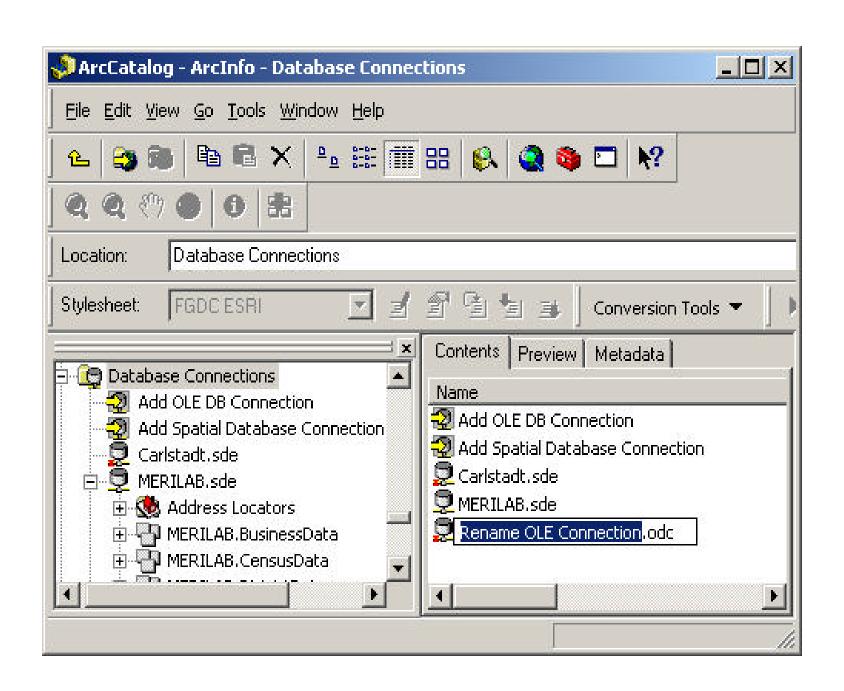












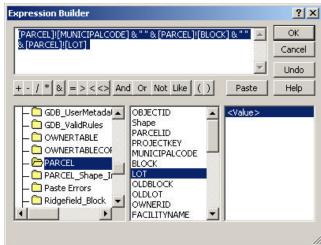


3. CREATE PROJECT KEY

- CREATE A PROJECT KEY IF IT IS MISSING
 - BERGEN / HUDSON DATABASES ALREADY HAVE IT
 - 2. PROCESS:
 - CONCATENATE MUNICIPAL CODE + BLOCK + LOT

[PARCEL]![MUNICIPALCODE] & " " & [PARCEL]![BLOCK] & " " &

[PARCEL]![LOT]

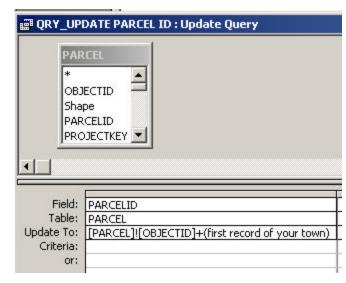




4. IMPORT PARCELID INTO MOD4 TABLE

- CREATE PARCEL ID ON THE PARCEL FEATURE CLASS (FC) ACCORDING TO YOUR TOWN RANGE
 - [PARCEL]![OBJECTID]+(first record of your town)

TOWN	RANGE FOR PARCEL ID
RIDGEFIELD	7,000 – 10,000
LITTLE FERRY	10,000 – 12,300
E.RUTHERFORD	12,300 - ?
RUTHERFORD	?



2. IMPORT PARCEL ID BY CREATING A MATCHING OUERY USING THE PROJECT KEY

Note: ProjectKey is equivalent to a Parcel Identification Number using a concatenate code to develop this UniqueId



IMPORT PARCELID INTO MOD4 TABLE (Cont.)

- 1. CREATE AN EMPTY FIELD IN THE OWNER TABLE AND CALL IT PARCEL ID
- 2. RUN AN UPDATE QUERY ON THAT FIELD BY USING THE PROJECT KEY AS THE RELATE FIELD

Note: You can also use the JOIN command in ArcMap and delete the extra records.



5. PARCEL MODEL OPERATIONS (REMINDER)

- 1. REFER TO THE "NJMC PARCEL DATA MODEL: PROPERTY TAX LIST (MOD4) & RELATIONSHIPS" FOR FURTHER INFORMATION.
- STEPS TO ACCOMPLISH IN THIS SECTION
 - CLEAN OWNER TABLE
 - 2. CREATE AN OWNER ID ON THE OWNER TABLE (**DO NOT** SUMMARIZE AT THIS POINT)
 - CREATE INTERMEDIATE TABLE BY EXPORTING OWNER TABLE; KEEP:
 - PROJECT KEY
 - OWNER ID
 - 3. GET **PARCELID** IN THE INTERMEDIATE TABLE BY AN UPDATE QUERY OR BY JOINING THE INTERMEDIATE AND OWNER BY PROJECT KEY

OBJECTID'	OWNERID*	PARCELID*	PROJECTKEY
5002	3765	4398	909 141 2
4596	3364	5290	909 192 11
1198	933	2620	205 76 5
2180	1678	3137	205 138 4
900	630	396	237 53 2
3271	2639	2426	205 5 69
397	562	157	237 12 15
810	793	879	262 303 8
5306	4069	6355	909 179 21
1585	1101	2481	205 67 1

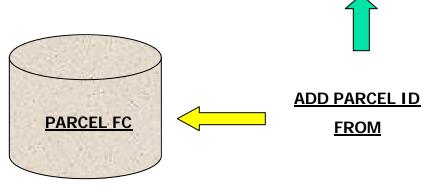


PARCEL MODEL OPERATIONS (schema)

OWNER TABLE

INTERMEDIATE TABLE

PROJECTKE	.ID*	PARCELID*	OWNERID*	OBJECTID*		OWNERZIP	OWNERCITYSTATE	OWNERADDRESS	OWNERNAME	OWNERID*
09 141 2	4398 9	439	3765	5002	D	07094	SECAUCUS, NJ	703 9TH ST	REINEKE, JANET P.	5003
09 192 11	5290 9	529	3364	4596		07072	CARLSTADT, NJ	653 HACKENSACK ST	GASIOR, ZBIGNIEW & KRYS	1448
05 76 5	2620 2	262	933	1198		07072	CARLSTADT, NJ	427 MONROE ST	MORALES, MARLON	1995
05 138 4	3137 2	313	1678	2180	227	07094	SECAUCUS, NJ	214 CENTRE AVE	MELI, JOSEPH & TRACEY	4597
37 53 2	396 2	39	630	900		07072	CARLSTADT, NJ	590 CENTRAL AVE	DELEASA, MICHAEL & DEBO	1275
05 5 69	2426 2	242	2639	3271	83	07074	MOONACHE, NJ	MOONACHIE RD	BOROUGH FIRST AID SQ	86
37 12 15	7.0		562	397		07072	CARLSTADT, NJ	331 WASHINGTON ST.	MINTIER, GARY & MARYANN	1976
62 303 8			793	810	Н	60089	BUFFALO GROVE, IL	999 COMMERCE COURT	JOHN S. SWIFT COMPANY	783
THE DECEMBER			- 0.55	1387.51		07074	MOONACHE, NJ	9 HENRY ST	DE RISO, CAMILLE	172
09 179 21	5355 9	635	4069	5306		7095	SECAUCUS, NJ	331 CENTRE AVE	AGUILAR, FRANK & LOURDE	2772





6. GROUP BY OWNER NAME

- IDENTIFY OWNERS THAT OWN MULTIPLE PARCELS
 - USE PROJECT KEY AND OWNER NAME

Find duplicates Ownernames : Select Query

SELECT OWNERTABLE.OWNERNAME, OWNERTABLE.OBJECTID, OWNERTABLE.PROJECTKEY, OWNERTABLE.OWNERADDRESS, OWNERTABLE.OWNERCITYSTATE, OWNERTABLE.OWNERZIPCODE, OWNERTABLE.PARCELID, OWNERTABLE.OWNERID

WHERE (((OWNERTABLE, OWNERNAME) In (SELECT [OWNERNAME] FROM [OWNERTABLE] As Tmp GROUP BY [OWNERNAME] HAVING Count(*)>1)))
ORDER BY OWNERTABLE, OWNERNAME;

2. ASSIGN OWNER ID – take the last OID from master table



OBJECT_ID	OWNER_ID	PROJECTKEY	OWNERNAME	OWNERADDRESS	OWNERCITYS	OWNERZIPCO
1	1	237 39 3.01	TIM BAKIRTAS			
2	1	237 37 2.01	TIM BAKIRTAS			
3	2	237 59 1.01	DOM ELEFANTE			
4	3	237 70 6.01	ALEX MARTI			
5	1	237 57 15	TIM BAKIRTAS			
6	2	237 39 8.01	DOM ELEFANTE			
3000						

Note: Once you have clean the Mod4 Table, split the table into the: Owner Table (Property Info) and the Assessment Table (Tax Info)



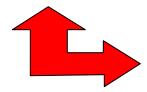
7. RESULT OF DATA INTEGRATION WITH RELATIONSHIPS



OWNER TABLE

OWNERID*	OWNERNAME	OWNERADDRESS	OWNERCITYSTATE	OWNERZIE
5003	REINEKE, JANET P.	703 9TH ST	SECAUCUS, NJ	07094
1448	GASIOR, ZBIGNEW & KRYS	653 HACKENSACK ST	CARLSTADT, NJ	07072
1995	MORALES, MARLON	427 MONROE ST	CARLSTADT, NJ	07072
4597	MELI, JOSEPH & TRACEY	214 CENTRE AVE	SECAUCUS, NJ	07094
1275	DELEASA, MICHAEL & DEBO	590 CENTRAL AVE	CARLSTADT, NJ	07072
86	BOROUGH FIRST AID SQ	MOONACHE RD	MOONACHIE, NJ	07074
1976	MINTIER, GARY & MARYANN	331 WASHINGTON ST.	CARLSTADT, NJ	07072
783	JOHN S. SWIFT COMPANY	999 COMMERCE COURT	BUFFALO GROVE, IL	60089
172	DE RISO, CAMILLE	9 HENRY ST	MOONACHIE, NJ	07074
2772	AGUILAR, FRANK & LOURDE	331 CENTRE AVE	SECAUCUS, NJ	7095

INTERMEDIATE TABLE



R1: BY PARCELID

3	OBJECTID*	OWNERID*	PARCELID*	PROJECTKEY
Þ	5002	3765	4398	909 141 2
	4596	3364	5290	909 192 11
	1198	933	2620	205 76 5
	2180	1678	3137	205 138 4
	900	630	396	237 53 2
	3271	2639	2426	205 5 69
	397	562	157	237 12 15
	810	793	879	262 303 8
	5306	4069	6355	909 179 21





8. STEPS TO IDENTIFY INCONSISTENT DATA

A. EXTRA RECORDS THAT HAVE DUPLICATE PROJECT KEYS (**DELETE**)



- B. FIND UNMATCHED RECORDS
 - 1. FROM MOD4 NOT PRESENT IN THE PARCEL FC (MOST CASES **DELETE**)
 - **OR YOU CAN DUMP THEM INTO A SEPARATE TABLE
 - 2. FROM THE PARCEL FC NOT PRESENT IN MOD 4 (MISSING)





8.A. DELETE EXTRA RECORDS

- SOMETIMES MOD4 DATA HAS DUPLICATE RECORDS THAT NEED TO BE DELETED
 - DUPLICATE PROJECT KEYS

Find duplicatesPK for OWNERTABLE: Select Query

[OWNERTABLE].[PARCELID], [OWNERTABLE].[OWNERID]

WHERE (((OWNERTABLE.PROJECTKEY) In (SELECT [PROJECTKEY] FROM [OWNERTABLE] As Tmp GROUP BY [PROJECTKEY], [OWNERNAME] HAVING Count(*)>1 And [OWNERNAME] = [OWNERTABLE]. [OWNERTABLE]. [OWNERTABLE]. [OWNERNAME])))

EXTRA RECORDS THAT DOES NOT EXIST IN THE TAX MAPS.



- Frequently Asked Questions: My tax maps and Mod4 info do not match, Which data should I follow?
- Check last update of tax map (First page or specific sheet)
- City View (In District)
- Mod 4 data update to Mid 2003



8.B.1 FIND UNMATCHED RECORDS FROM MOD4 NOT PRESENT IN PARCEL FC

- IDENTIFY THOSE RECORDS IN MOD4 THAT DO NOT HAVE A MATCHING RECORDS IN THE PARCEL FC.
 - THEY DO NOT EXIST BECAUSE OF SUBDIVISIONS/CONSOLIDATIONS, Etc.
 - PROJECT KEY IN THE PARCEL DOES NOT MATCH WITH MOD4
 - FXTRA SPACES
 - BLOCK OR LOT FIELDS DEFINED AS A NUM MISSING CHARACTERS
 - MOD4 DATA IS MORE UPDATED NEED TO CHECK FOR NEWEST SUBDIVISIONS
 - BLOCK OR LOT DESIGNATION HAS CHANGED

■ OWNERTABLE Without Matching PARCEL pk : Select Query

SELECT OWNERTABLE.OBJECTID, OWNERTABLE.PROJECTKEY, OWNERTABLE.OWNERNAME, OWNERTABLE.OWNERADDRESS, OWNERTABLE.OWNERCITYSTATE, OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTABLE.OWNERTA

FROM OWNERTABLE LEFT JOIN PARCEL ON OWNERTABLE.PROJECTKEY = PARCEL.PROJECTKEY WHERE (((PARCEL.PROJECTKEY) Is Null));

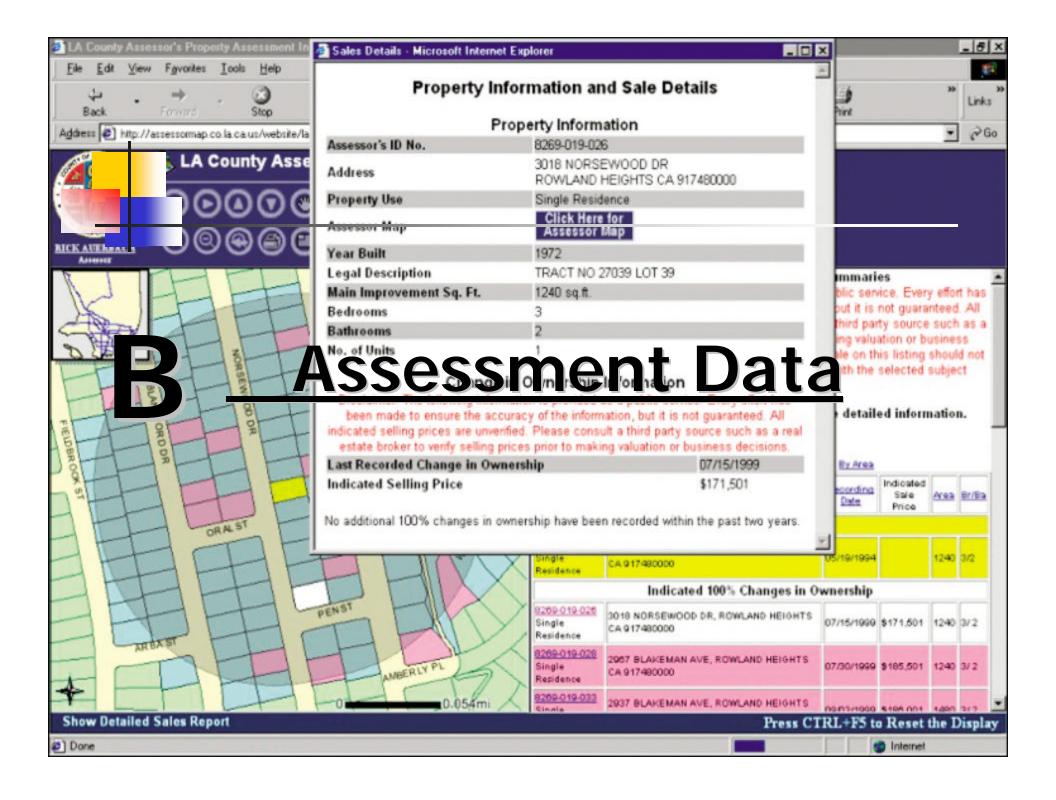


8.B.2 FIND UNMATCHED RECORDS FROM PARCEL NOT PRESENT IN MOD4

- 1. IDENTIFY THOSE RECORDS IN THE PARCEL FC THAT DO NOT HAVE MATCHING RECORDS IN MOD4.
 - SAME THAN B.1
 - CHECK FOR ADDITIONAL LOTS FOR OWNER INFORMATION
 - 3. USE CITY VIEW AS A REFERENCE (IN DISTRICT)
 - 4. REPORT RESULTS TO MUNICIPALITY

PARCEL Without Matching OWNERTABLE : Select Query

SELECT [PARCEL].[PARCELID], [PARCEL].[PROJECTKEY], [PARCEL].[OWNERNAME]
FROM PARCEL LEFT JOIN OWNERTABLE ON [PARCEL].[PROJECTKEY] = [OWNERTABLE].[PROJECTKEY]
WHERE ([OWNERTABLE].[PROJECTKEY] Is Null);





9. NEW FIELDS FOR MOD4

Filler2

BankCode

DeedBook

DeedPage

SalePrice

SalesPriceCode

SaleAssessment

SaleSR1AUnCode

SpouseSSNumber

NoOfDwellings

RebateCode

DeliquentCode

SocialSecurityNumber

NoOfCommercialDW

PercentOwnedCode

MultipleOccupancy

DeedDateMMDDYY

MortageAccountNumber

PARCEL-OWNER DATA

Field Name	Data Type		
ID	AutoNumber		
CountryDistrict	Number		
Blockt	Text		
Block	Number		
Lott	Text		
Lot	Number		
Qualifier	Text		
RecordID	Number		
Filler1	Number		
TransactionDateMMDDYY	Number		
TransactionUpdateNo	Number		
TaxAccountNumbert	Text		
TaxAccountNumber	Number		
PropertyClasst	Text		
PropertyClass	Number		
PropertyLocationt	Text		
PropertyLocation	Text		

Field Name	Data Ty
PropertyLocation	Text
BuildingDescription	Text
LandDescription	Text
CalculatedAcreage	Number
AdditionalLots1	Text
AdditionalLots2	Text
Zoning	Text
TaxMapPageNumber	Text
OwnerName	Text
StreetAddress	Text
CityState	Text
ZipCode	Number
NumberOfOwners	Number
DeductionAmount	Number

Text

Text

Text

Text

Text

Number

Number

Number

Text

Text

Text

Text

Text

Text

Text

Text

Text

Number

ASSESSMENT DATA

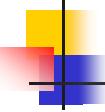
PropertyFlags	Text
TenantRebateResponseFlag	Text
TenantRebateBaseYear	Number
TenantRebateBaseYearTax	Number
TenantRebateBaseYearNetVa	Number
Filler3	Text
TaxesLastYearTax	Number
TaxesCurrentYearTax	Number
TaxesNonMunicipalHalf1	Number
TaxesNonMunicipalHalf2	Number
TaxesMunicipalHalf1	Number
TaxesMunicipalHalf2	Number
TaxesNonMunicipalHalf3t	Text
TaxesNonMunicipalHalf3	Number
TaxesMunicipalHalf3t	Text
TaxesMunicipalHalf3	Number
TaxesBillStatusFlag	Number
TaxesEstimatedQTR3	Text

ExemptPropListOwner	Number
ExemptPropListUse	Number
ExemptPropListDescr	Number
InitialDateMMDDYY	Number
FurtherDateMMDDYY	Number
StatueNumber	Text
FacilityName	Text
BuildingClassCode	Text
YearConstructed	Text
AssessmentCode	Text
LandValue	Number
ImprovementValue	Number
NetValue	Number
SpecialTaxCode1	Text
SpecialTaxCode2	Text
SpecialTaxCode3	Text
SpecialTaxCode4	Text
ExemptionsCode1	Text
ExemptionsAMT1	Number
ExemptionsCode2	Text
ExemptionsAMT2	Number
ExemptionsCode3	Text
ExemptionsAMT3	Number
ExemptionsCode4	Text
ExemptionsAMT4	Number
DeductionsSeniorCitizens	Number
DeductionsVeteransCitizens	Number
DeductionsWidowsCitizens	Number
DeductionsSurvSpouserCitize	Number
DeductionsDisabledCitizens	Number
UserField1	Text
UserField2	Text
OldPropertyId	Text
CensusTranck	Text
CensusBlock	Text
Propertyl IseCode	Text



10. NEXT UPDATE

- 1. CHANGES FROM MOD4 2003 TO MOD4 2004
- 2. HOW TO UPLOAD EXISTING OWNERS INTO THE MASTER OWNER TABLE
- 3. ASSESSMENT DATA. FIELDS AND RELATIONSHIPS
- 4. LIVE UPDATES WHEN DOING LAND USE SURVEY
- 5. PERFORM AUTOMATIC UPDATES IN INTERMEDIATE TABLE
- 6. TENANT & RTK TABLES AND RELATIONSHIPS
- 7. IMPORTING PROPERTY TAX LIST USING THE TAX LIST FILE LAYOUT



11. QUESTIONS / SUGGESTIONS

